West Virginia Grade 5

FlyBy MathTM Alignment Mathematics Content Standards and Objectives

Standard 1: Number and Operations (MA.S.1)

Students will:

- demonstrate understanding of numbers, ways of representing numbers, and relationships among numbers and number systems;
- demonstrate meanings of operations and how they relate to one another; and
- compute fluently and make reasonable estimates

through communication, representation, reasoning and proof, problem solving, and making connections within and beyond the field of mathematics.

Number and Operations Objectives Students will:	FlyBy Math [™] Activities
MA.5.1.12 solve grade level appropriate story problems using multiple strategies.	Use tables, graphs, and equations to solve aircraft conflict problems.

Standard 2: Algebra (MA.S.2)

Students will:

- demonstrate understanding of patterns, relations, and functions;
- represent and analyze mathematical situations and structures using algebraic symbols;
- use mathematical models to represent and understand quantitative relationships; and
- analyze change in various contexts

through communication, representation, reasoning and proof, problem solving, and making connections within and beyond the field of mathematics.

Algebra Objectives Students will: MA.5.2.2 use input/output model with grade appropriate functions.	FlyBy Math [™] Activities Use tables, graphs, and equations to solve aircraft conflict problems.
MA.5.2.4 evaluate an expression given a value for the variable.	Represent distance, speed, and time relationships for constant speed cases using tables, bar graphs, line graphs, equations, and a Cartesian coordinate system.

Standard 4: Measurement (MA.S.4)

Students will:

- demonstrate understanding of measurable attributes of objects and the units, systems, and processes of measurement; and
- apply appropriate techniques, tools and formulas to determine measurements through communication, representation, reasoning and proof, problem solving, and making connections within and beyond the field of mathematics.

Measurement Objectives

Students will:

MA.5.4.7 calculate elapsed time.

FlyBy MathTM Activities

--Calculate and measure the position and time of simulated aircraft. Represent that motion using tables, graphs, equations, and experimentation.

Standard 5: Data Analysis and Probability (MA.S.5)

Students will:

- formulate questions that can be addressed with data and collect, organize, and display relevant data to answer them;
- select and use appropriate statistical methods to analyze data;
- develop and evaluate inferences and predictions that are based on models; and
- apply and demonstrate an understanding of basic concepts of probability

through communication, representation, reasoning and proof, problem solving, and making connections within and beyond the field of mathematics.

Data Analysis and Probability Objectives Students will:

MA.5.5.3 construct, read, and interpret tables, charts, and graphs to draw reasonable inferences or verify predictions.

FlyBy MathTM Activities

- --Represent distance, speed, and time relationships for constant speed cases using tables, bar graphs, line graphs, equations, and a Cartesian coordinate system.
- --Use tables, bar graphs, line graphs, equations, and a Cartesian coordinate system to draw conclusions.